

[MATCHING LAYER HAVING GRADIENT IN IMPEDANCE FOR ULTRASOUND TRANSDUCERS]

Abstract of Disclosure

A matching layer for ultrasound transducers has a gradient in impedance value from one surface to the other surface of the matching layer. The matching layer is composed of a plurality of sublayers made of composite materials and securely attached together and is disposed on the surface of the transducer element. The first sublayer adjacent to the transducer element has an impedance value less than or equal to that of the transducer element. The last sublayer adjacent to the target has an impedance value greater than or equal to that of the target. The impedance values of the sublayers decrease monotonically from the first to the last sublayer.

Figures